

Practical Workshop On Emissions Inventory For Tribes

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ABSTRACT

After taking the Northern Arizona University, Institute for Tribal Environmental Professionals (ITEP), Emissions Inventory (EI) Course, I felt strongly that it could be expanded upon to include a portion where the participants could spend class time writing a draft EI particular to their area of expertise (e.g, their reservation) and at the end of the workshop, walk away with a draft version that could eventually be finalized. The Wintun EPA office decided to initiate such an effort and create a workshop using a portion of ITEP's existing curriculum and expanding it so draft EIs could be created by each participant. The hope was to have each attendee leave the two (2) day workshop with a draft (EI) for their Tribal organization.

The Wintun's EI workshop was intended to take a "step by step" approach from lessons learned by our department. Attached to the agenda sent out to each student, was a copy of a list of items that could be used to develop their emissions inventory. The material list was based on our experience and would allow the attendees to use the data in an EI format. The materials list included:

Written Tribal background Info	Current operations on the Reservation
Environmental Impact Studies	Overall Economic Development Plan
Environmental Assessments	Land Use Plans
Legal description of Tribal Lands	BIA Transportation Plans
Treaties (if available)	Tribal Air Ordinances
Tribal Health Reports (IHS)	Initial Air Quality Assessment
Housing Plans i.e. development	Current work plan
Housing Plan i.e. NAHASDA or HUD	Local Phone Book
Emission estimates from Local Air Pollution Control District	
Calculator, Laptop (if available), we did provide computers for those in need.	

Any other information that could be used to determine activities that could be omitting pollutants on the reservation

On the first day of the workshop, we went over some of the curriculum from the EI course taught by ITEP. We had requested an ITEP instructor who was versed in the EI course. The instructor would assist in portions of the course to include calculations. The students were given a

template or skeleton EI. The components of the EI model were in outline form. For the next few days the students went through the components, learning what the components were and where they might find the information in the documents that they brought. They extracted information from the documents from their respective Tribes and placed the information into the draft model. And this led to the discussion of why the information was important. Each day they had lecture and worked in each component, allowing for discussion and assisting in phrasing or in calculations. The text from the ITEP course was used in part and also the Air Chief disk. This was done in a logical order.

At the end of each day we gave homework of reflective writing for the students. At the beginning of each day they asked questions and shared their experience and expectations. To this date, one of the Tribes that attended the class has submitted their EI to the National Data Base.

Introduction

As I stated earlier, after taking the Northern Arizona University's, Emissions Inventory Workshop, there was something missing. I had looked at all the materials and reviewed the information on the EPA Air Chief website. I still had questions of how to start. After talking with another tribe who had started getting the information on the sources in their area, the idea came of how to put the pieces together. The biggest idea was to allow the Tribe's to leave with a draft Emissions Inventory when they left the class. We did understand that a lot of tribes, like ourselves, were not familiar with the process involved. Understanding that consultants were available that could do the EI, we chose to build the capacity of the tribes involved.

Body

Before the students came to the class they were asked to bring the items from the *Materials List* that was sent with the course description and invitation to the class. The class started with an introduction and a blessing for the day. A power point presentation had been developed that would follow the class format and idea of establishing a process with explanation. This correlated with the NAU course. We then started with template version of an EI that NAU had provided during the course, extracting the information from the documents that they had brought in their materials list.

A step by step approach in the area that was being discussed in that block of instruction was demonstrated. Then the student was allowed to ask questions on content, phrasing and we used the information that they had brought to tailor the EI to their reservation. During this time they could also work on any other area that needed it. The TTN CHIEF website was used to get the calculation information and the Internet was used to research other questions that came up. (Sources listed)

It was also brought out in the class that a windshield survey was important to verify sources and locate new sources that might not have been on any other report or listing. Questions could be asked to verify emission data and the processes that the sources were using at the facilities.

Reflective writing was used to understand where the students were and used to guide the instructors in areas that needed more work. This was done in a time period at the start of the next day.

Conclusion

The idea of how we learn as Indian people was a factor. Learning more by doing, rather than by lecture, we tied the two together to create understanding. This seemed more tribally relevant.

Having a base to start from with a more hands-on approach created not only an understanding, it allowed the participants to create a draft EI during the workshop and walk away with a product of their labor.

References

“Emissions Inventory Workshop”, *Training Manual*. 1999. Institute of Tribal Environmental Professionals; Northern Arizona University; U.S.EPA.

TTNweb Chief, website. <http://www.epa.gov/ttn/chief/>, U.S. Environmental Protection Agency

Key Words

Emission Inventories

Tribal approach to EI

Practical Approach to Emission Inventories

EI